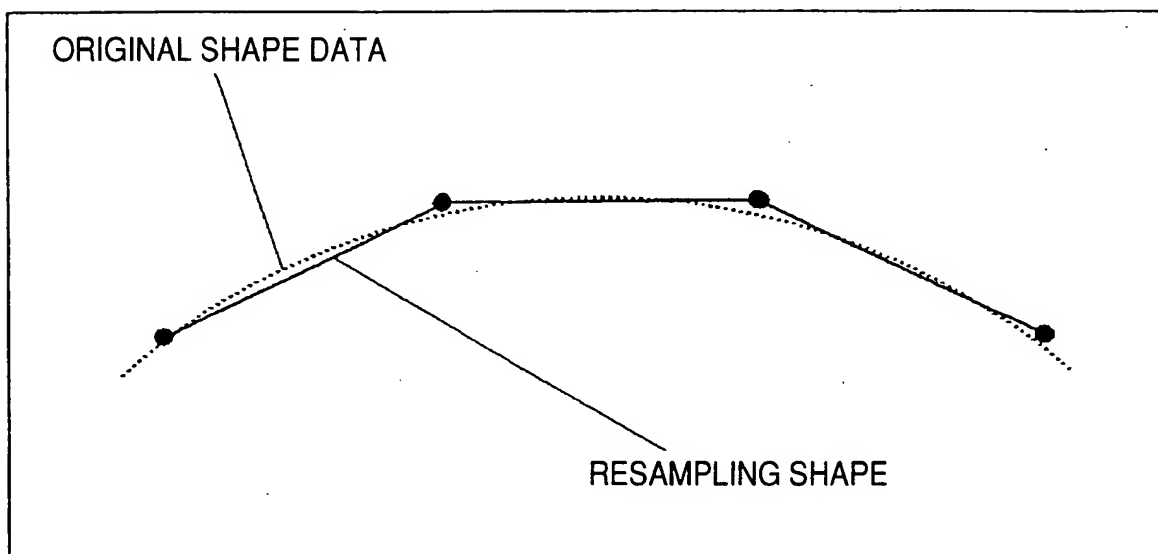
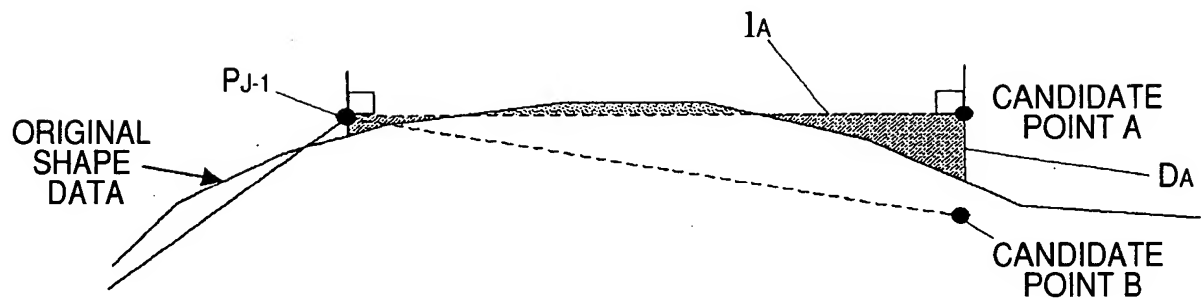


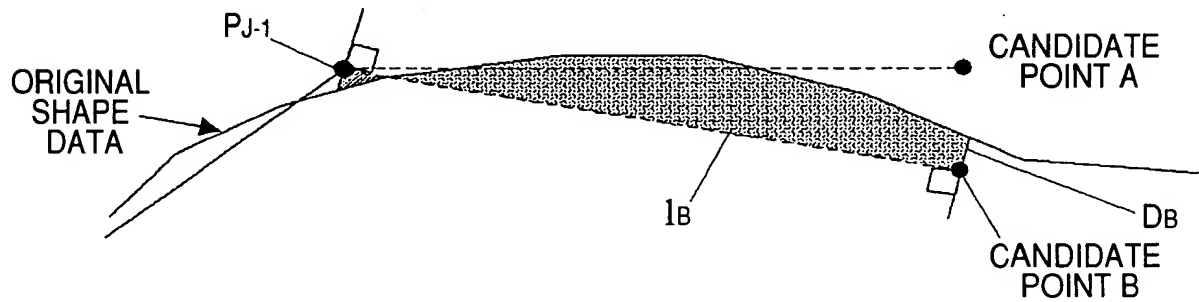
*FIG. 1*



*FIG. 2(a)*



*FIG. 2(b)*



**FIG. 3**

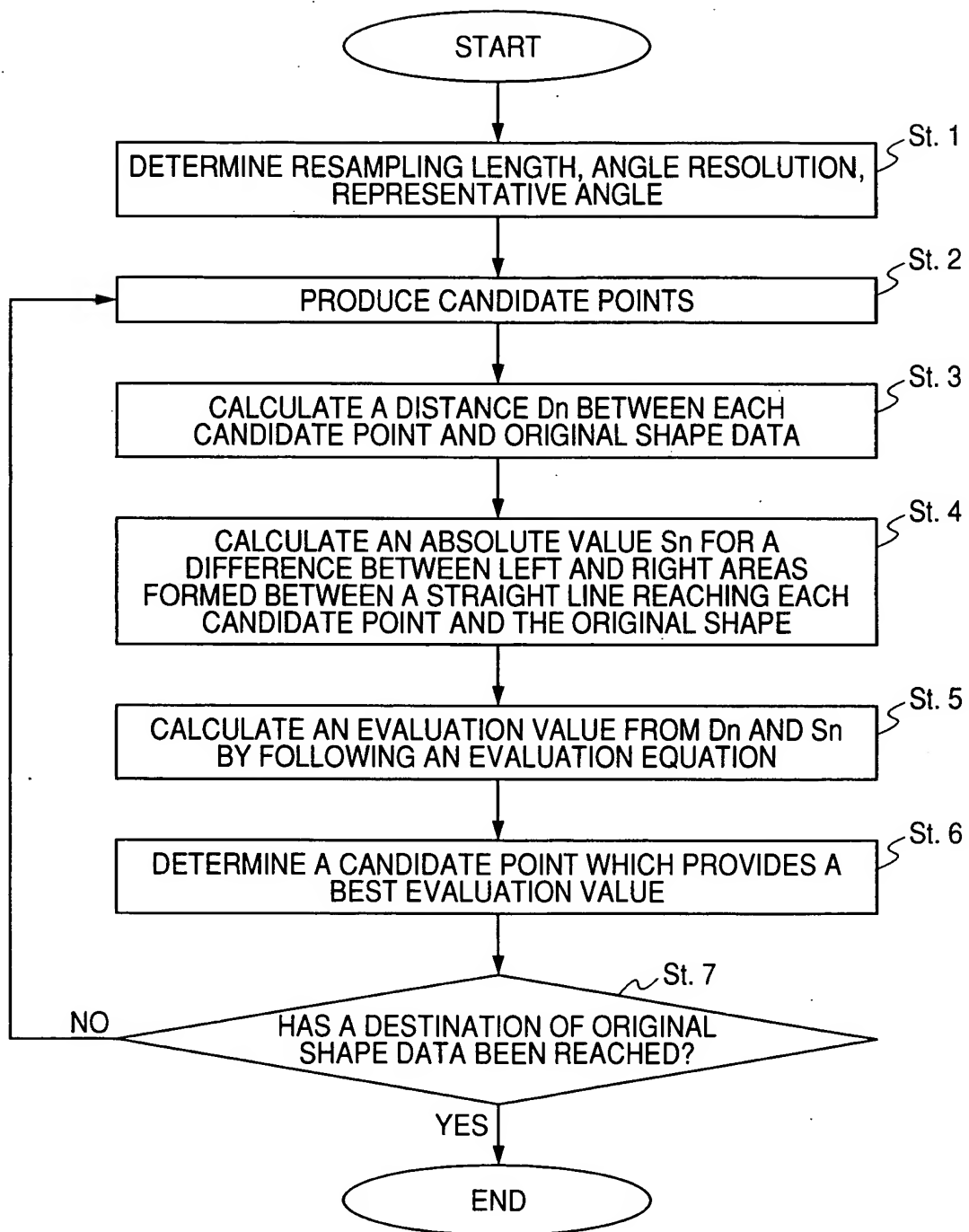


FIG. 4

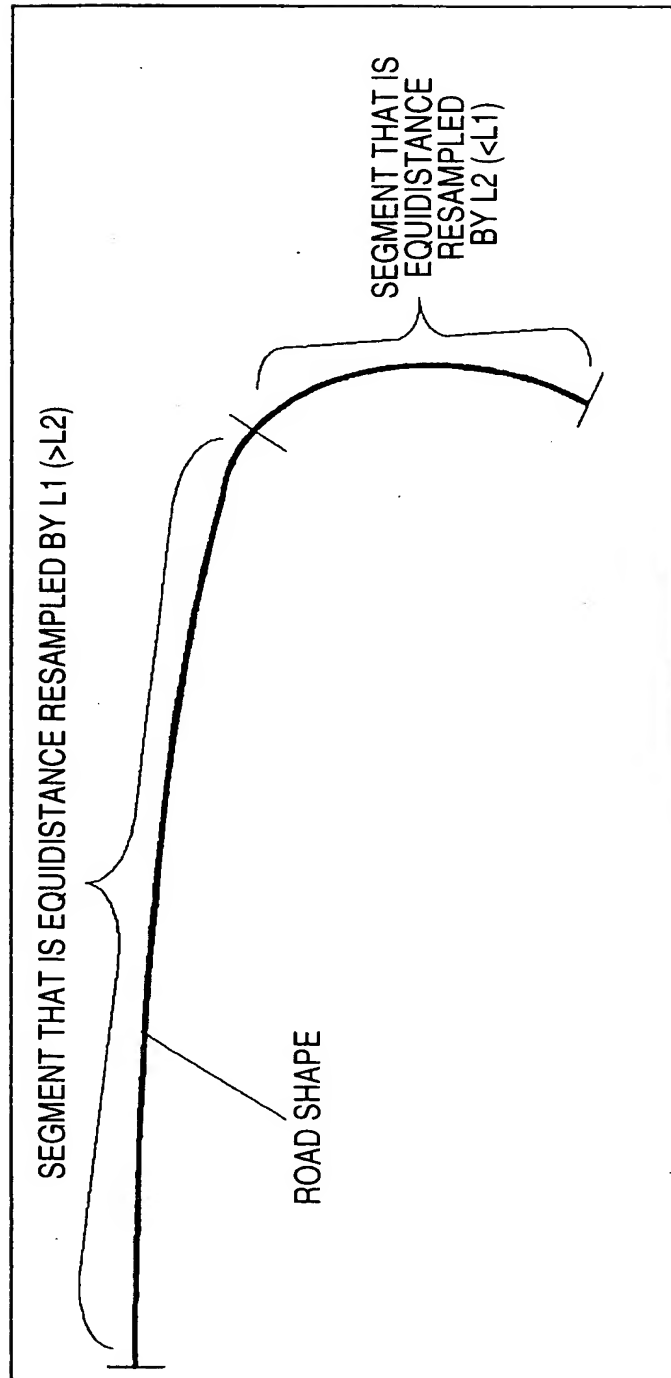


FIG. 5(a)

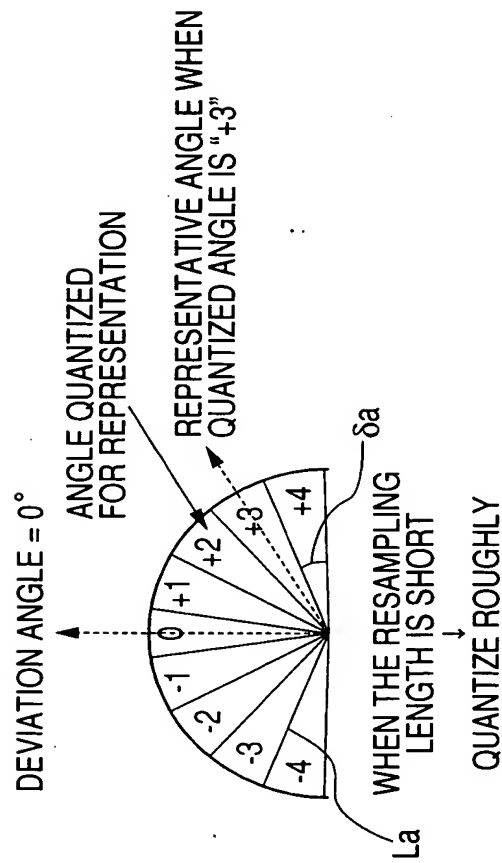
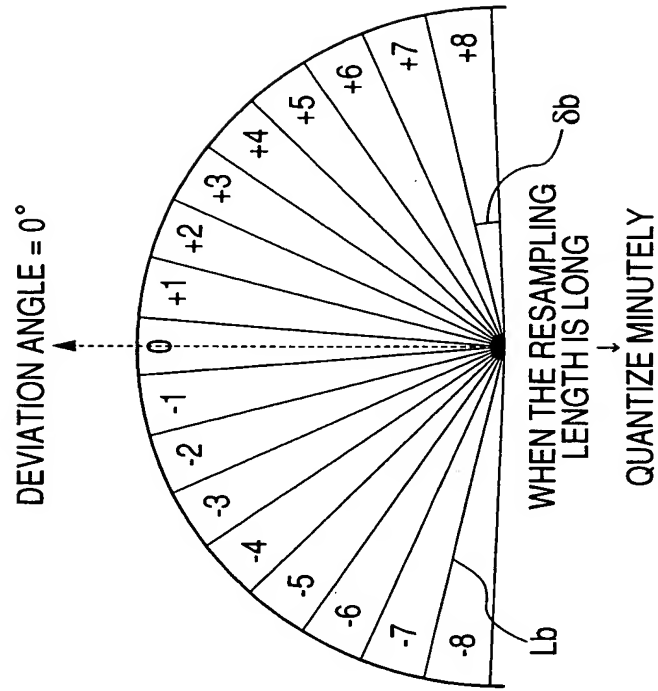
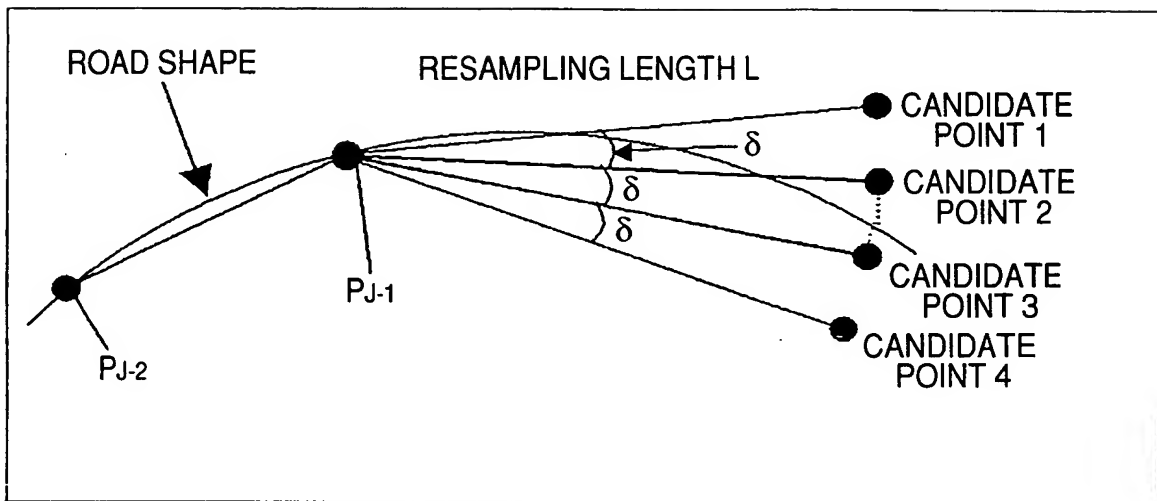


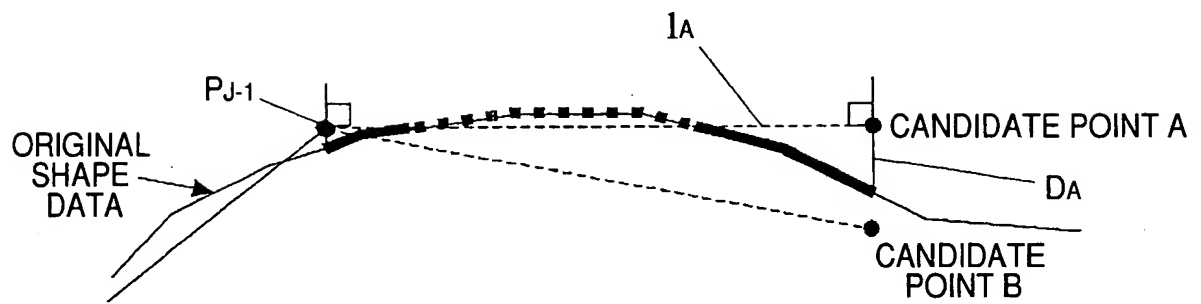
FIG. 5(b)



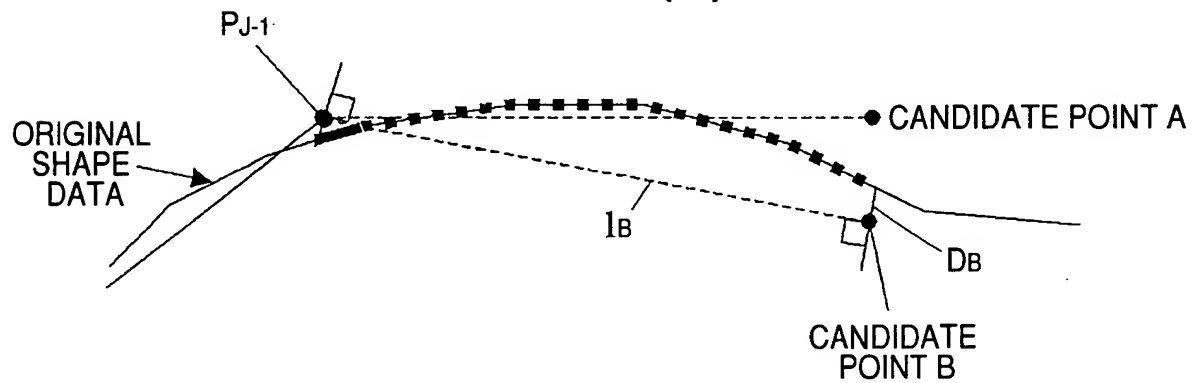
**FIG. 6**



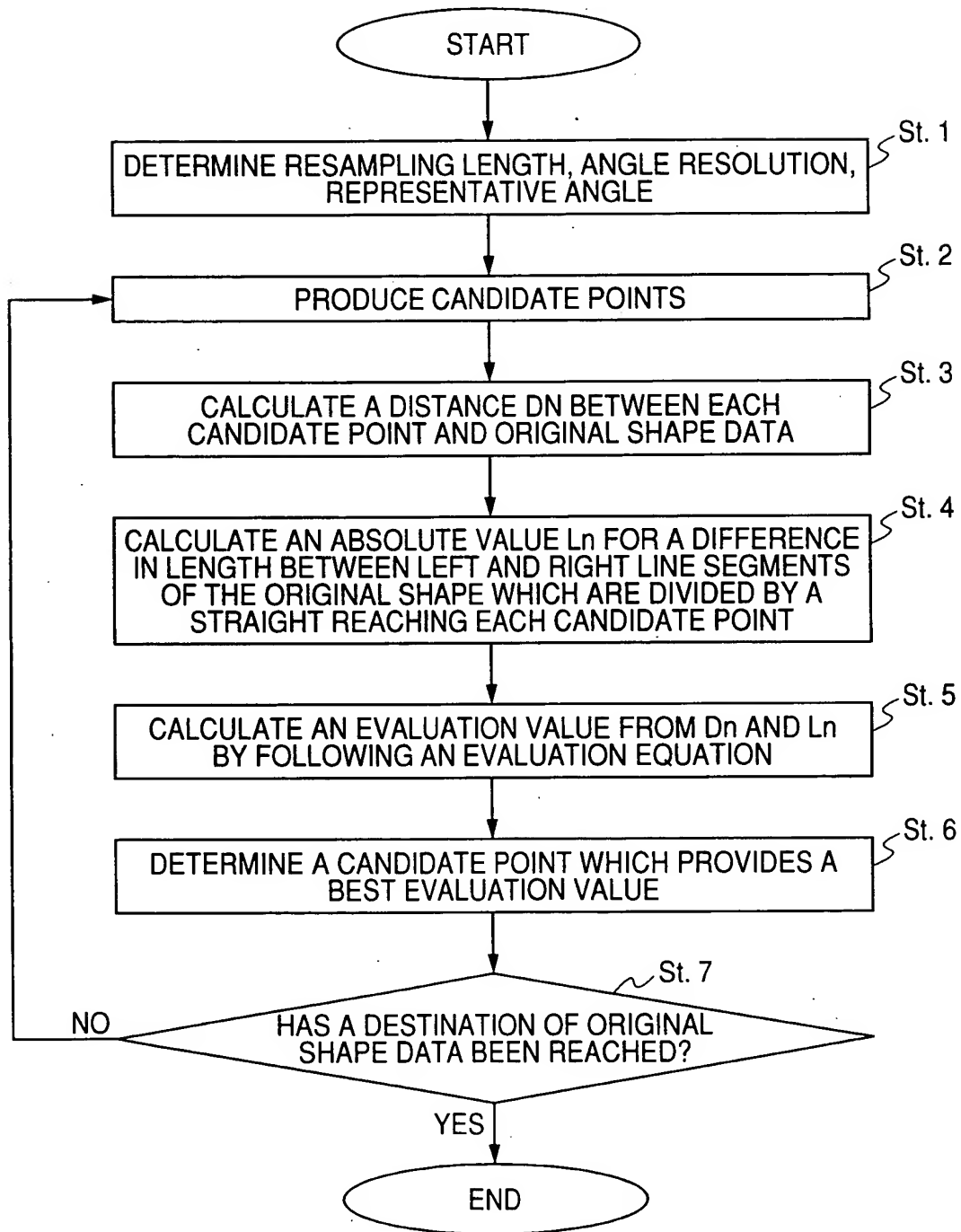
*FIG. 7(a)*



*FIG. 7(b)*

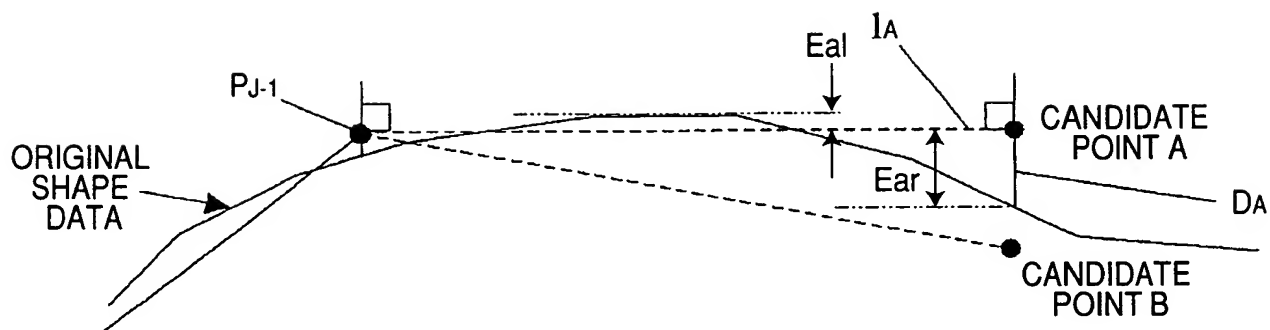


**FIG. 8**

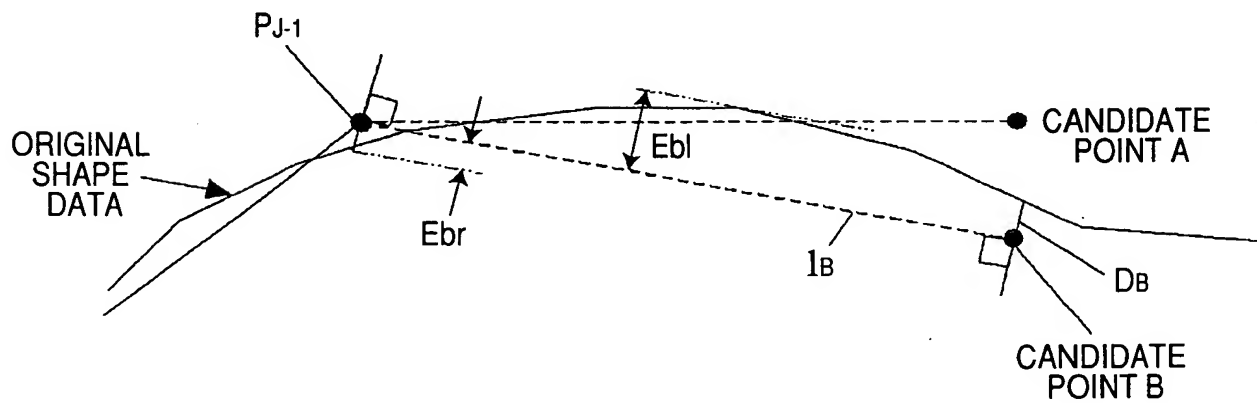




*FIG. 9(a)*



*FIG. 9(b)*



10/33

**FIG. 10**

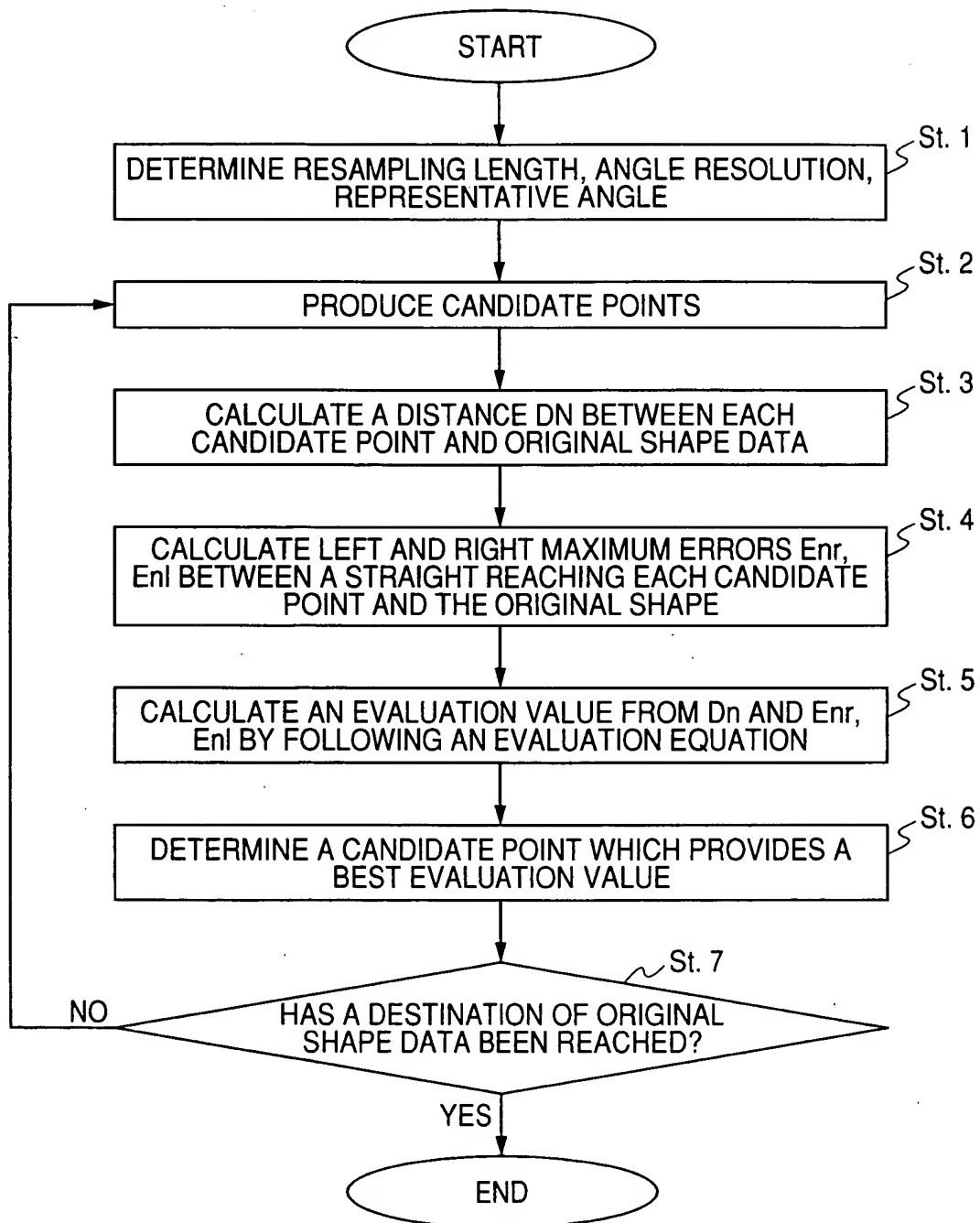
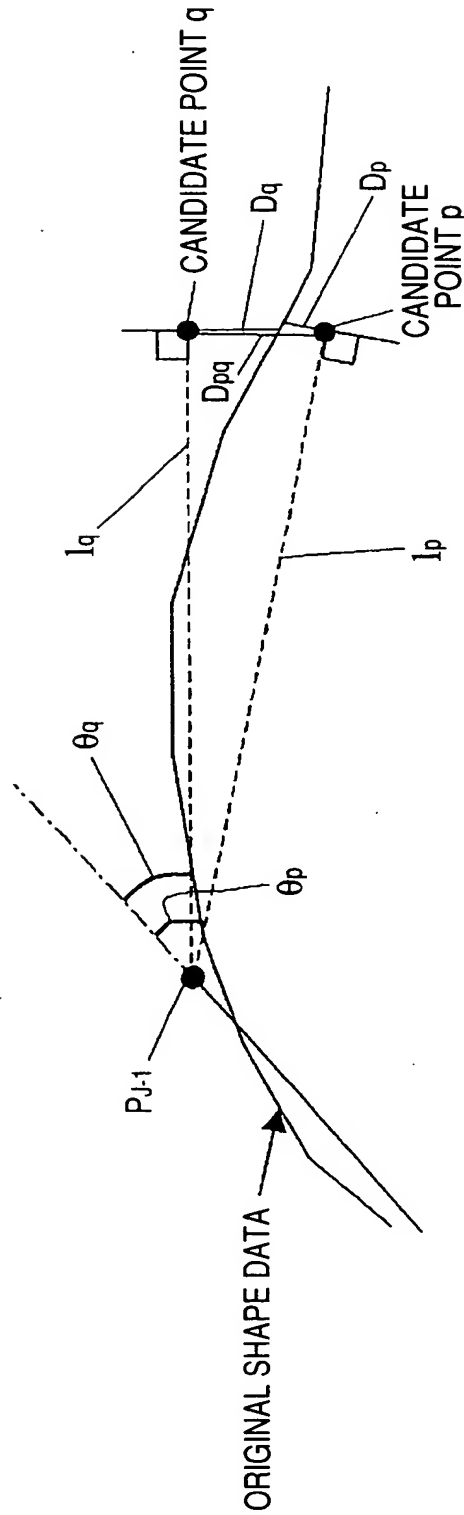
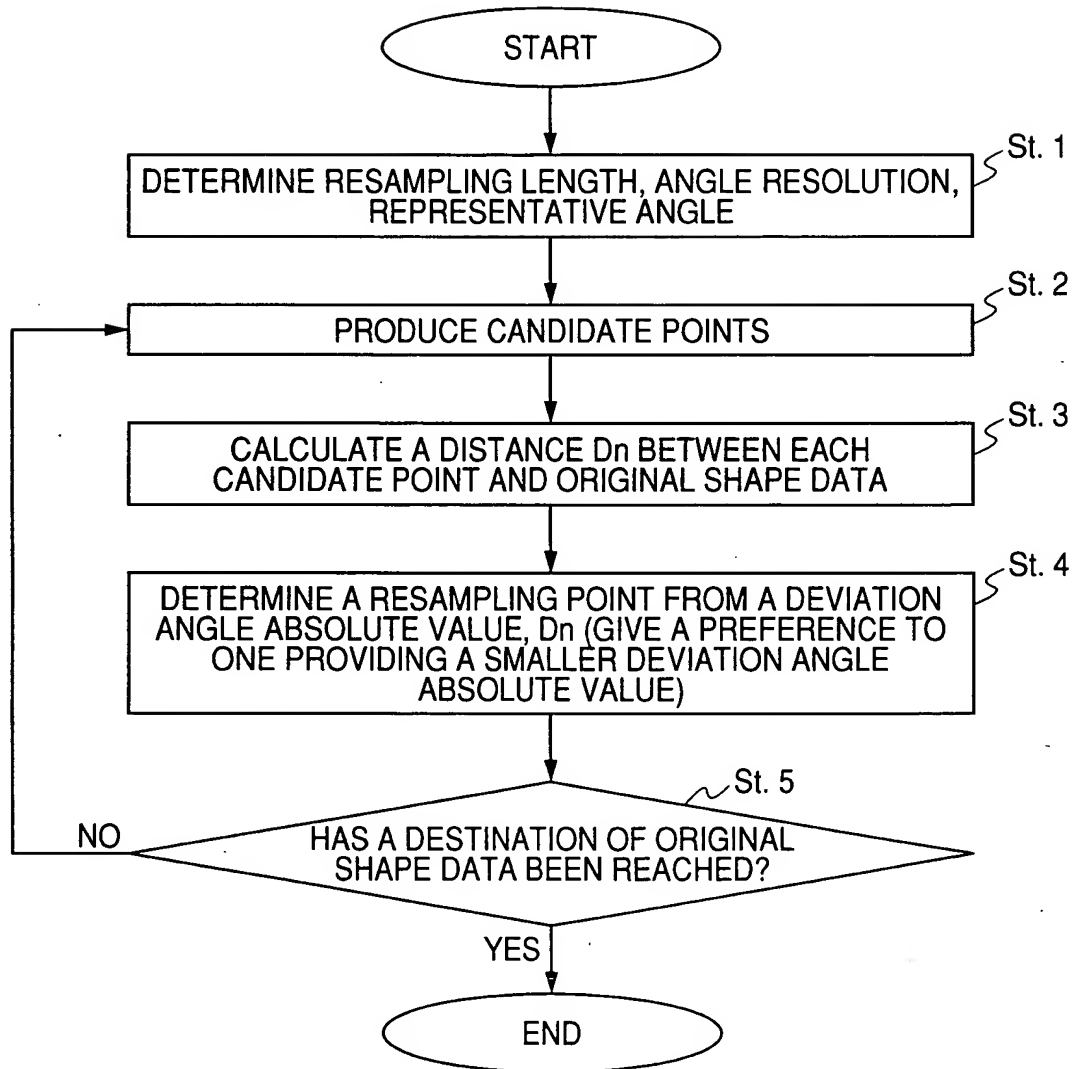


FIG. 11

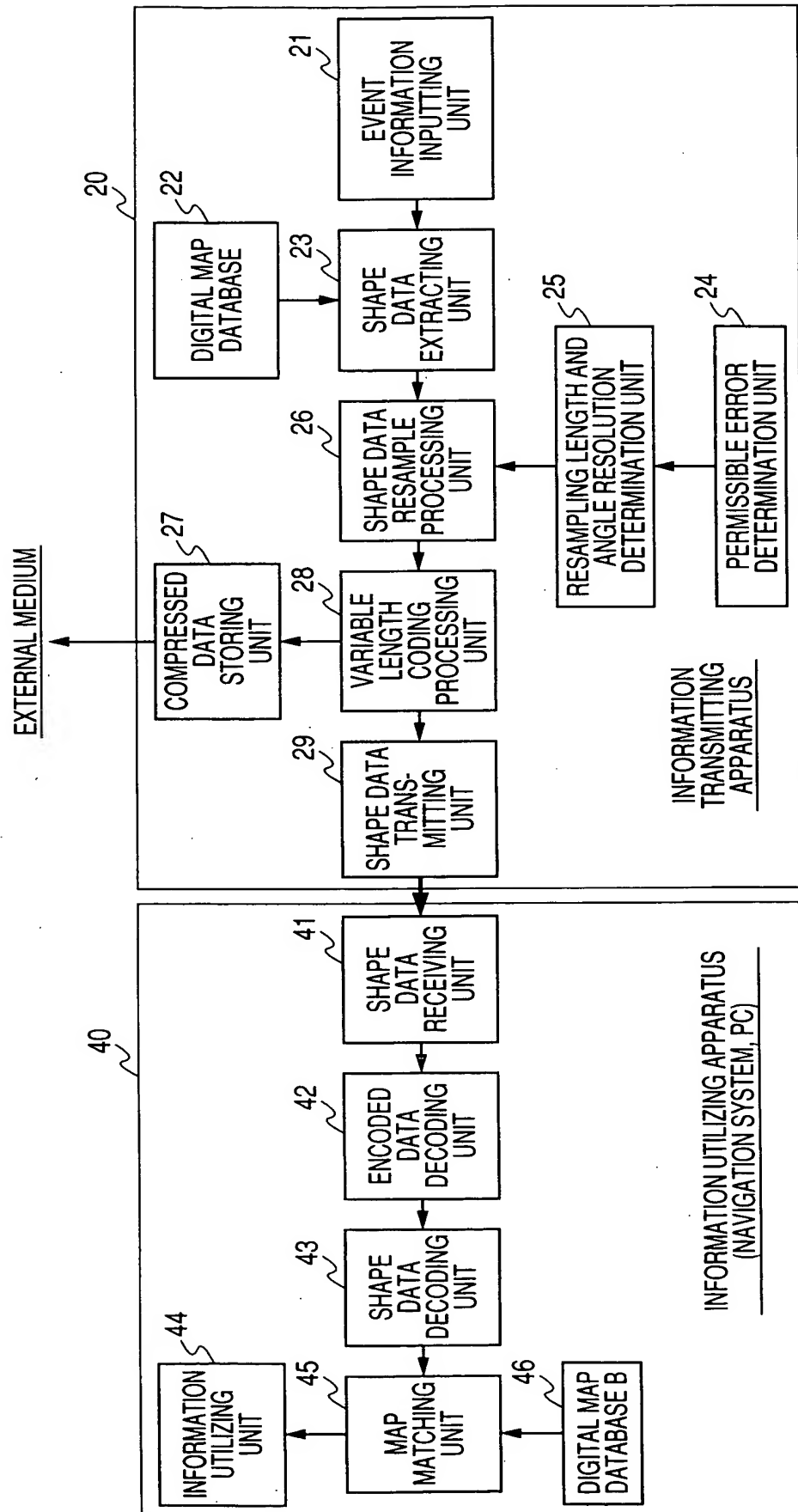


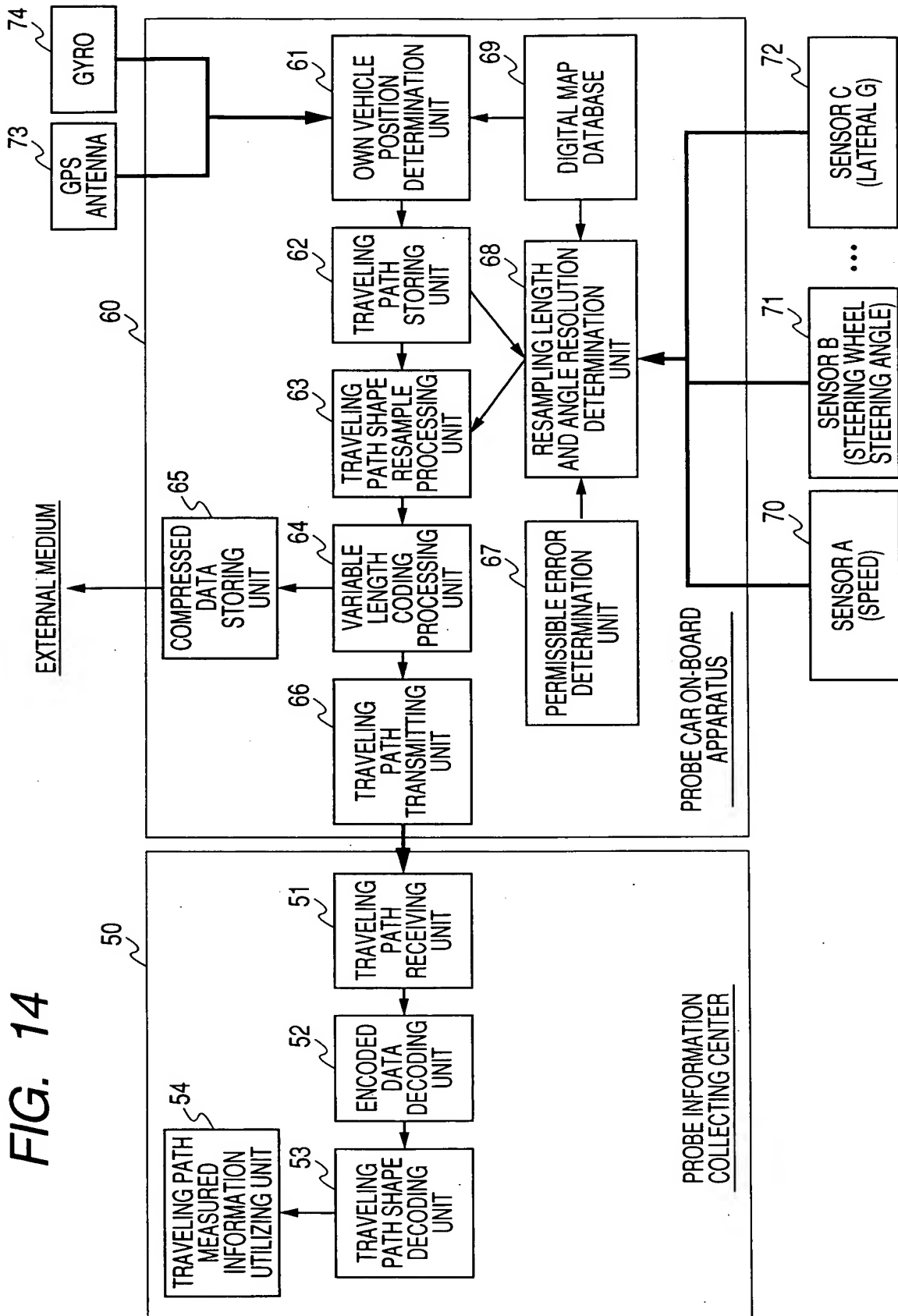
**FIG. 12**



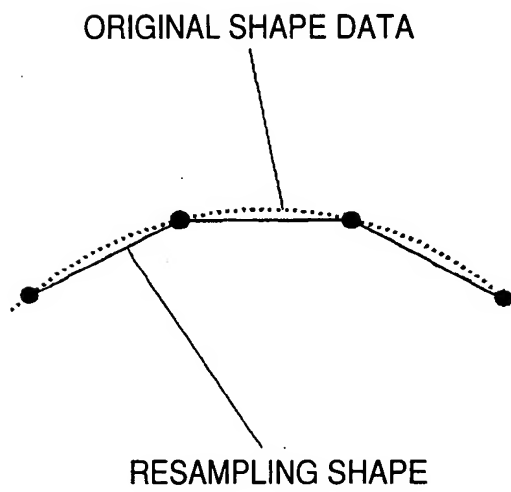
13 / 33

FIG. 13





*FIG. 15(a)*



*FIG. 15(b)*

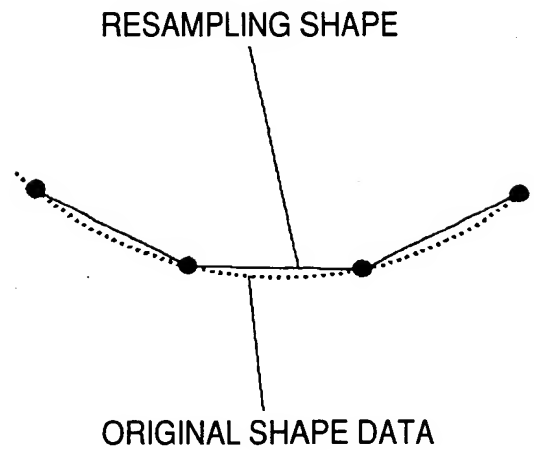


FIG. 16(a)

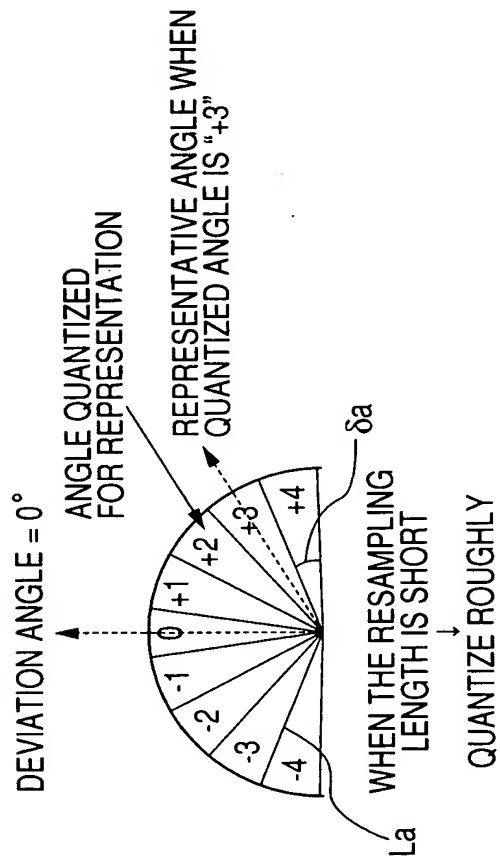
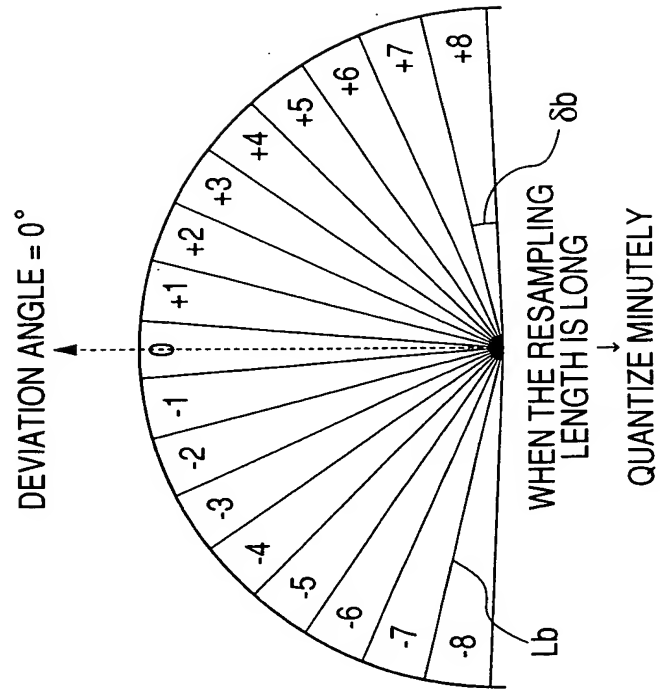


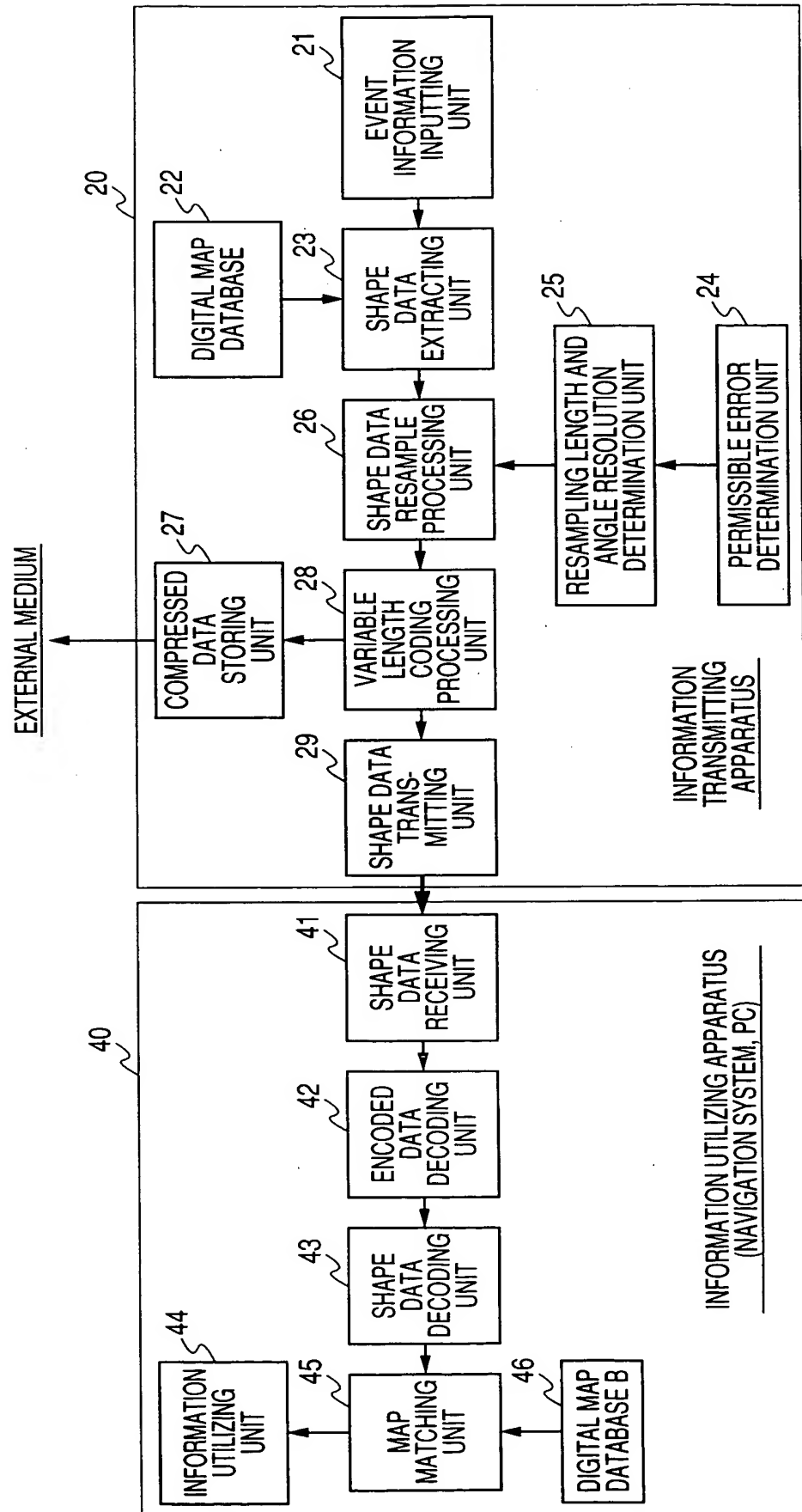
FIG. 16(b)





17 / 33

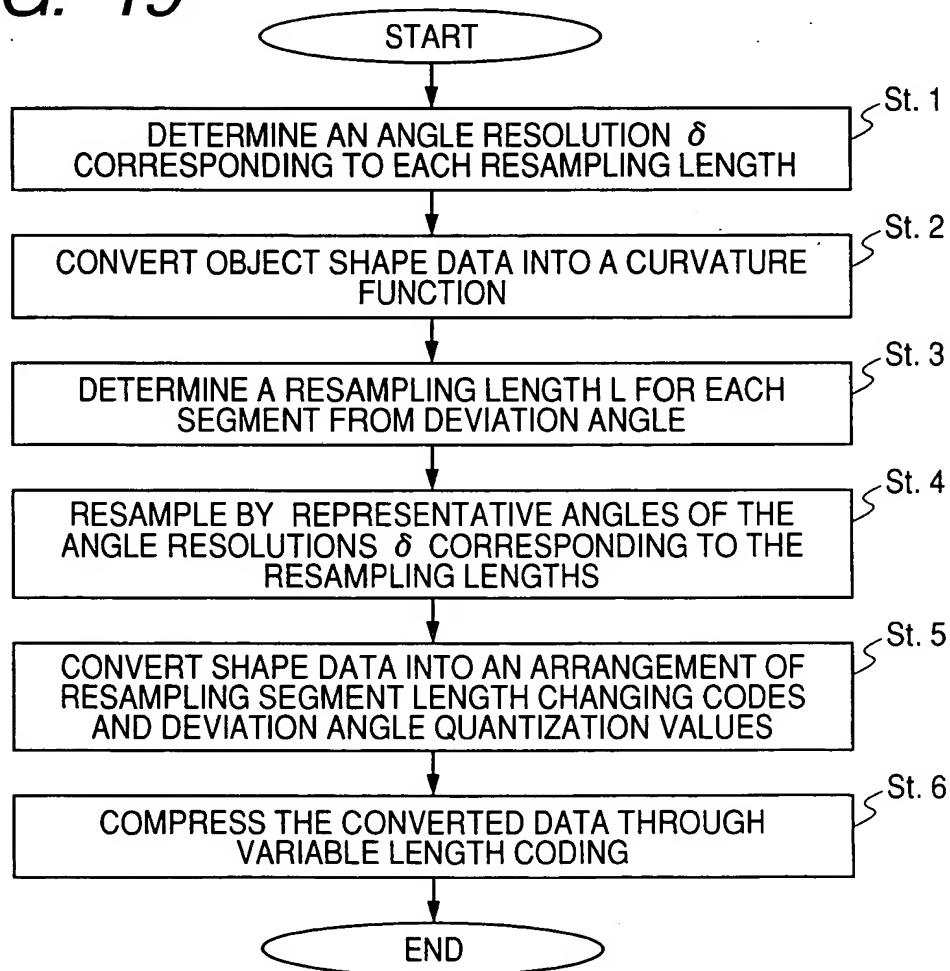
FIG. 17



**FIG. 18**

RESAMPLING LENGTH (m)	ANGLE RESOLUTION ( $^{\circ}$ ) $\delta$
10	6
20	4
40	3
80	2
160	2
320	1
640	1
1280	0.5

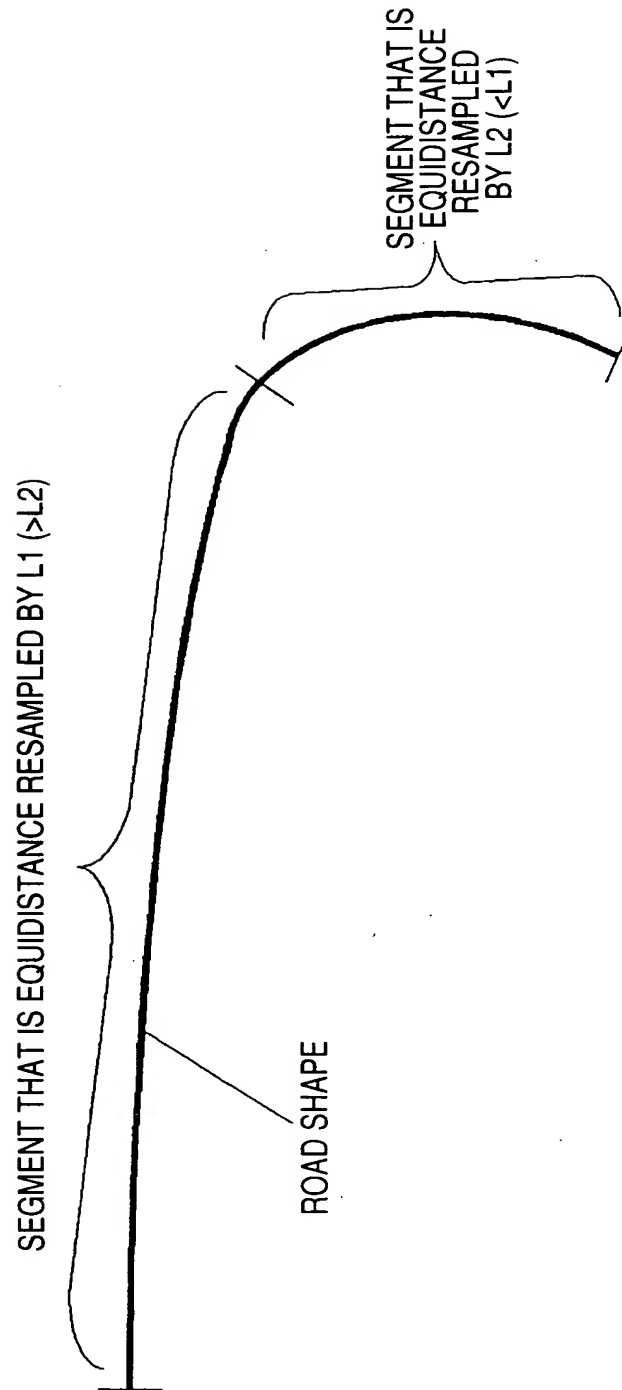
**FIG. 19**



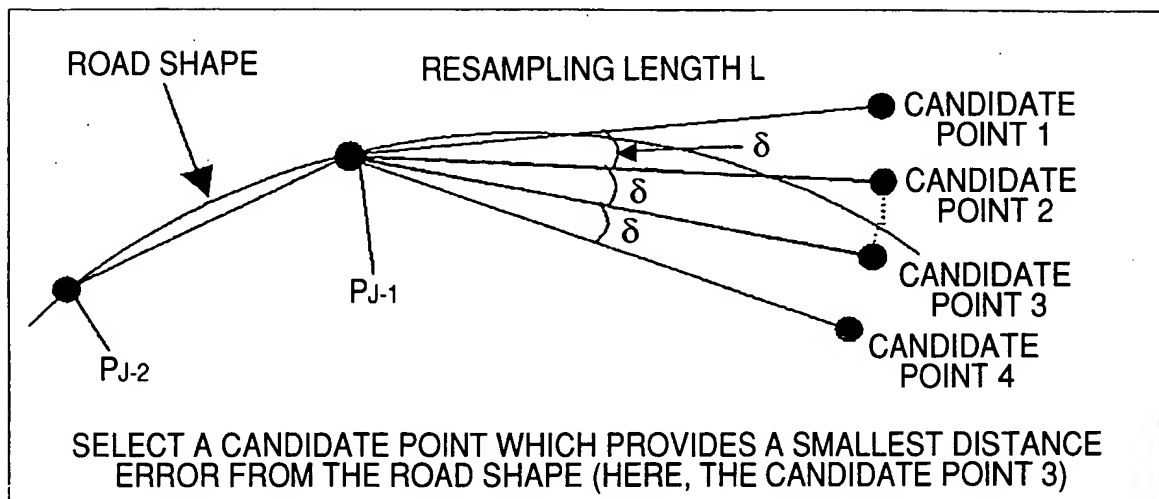
*FIG. 20*

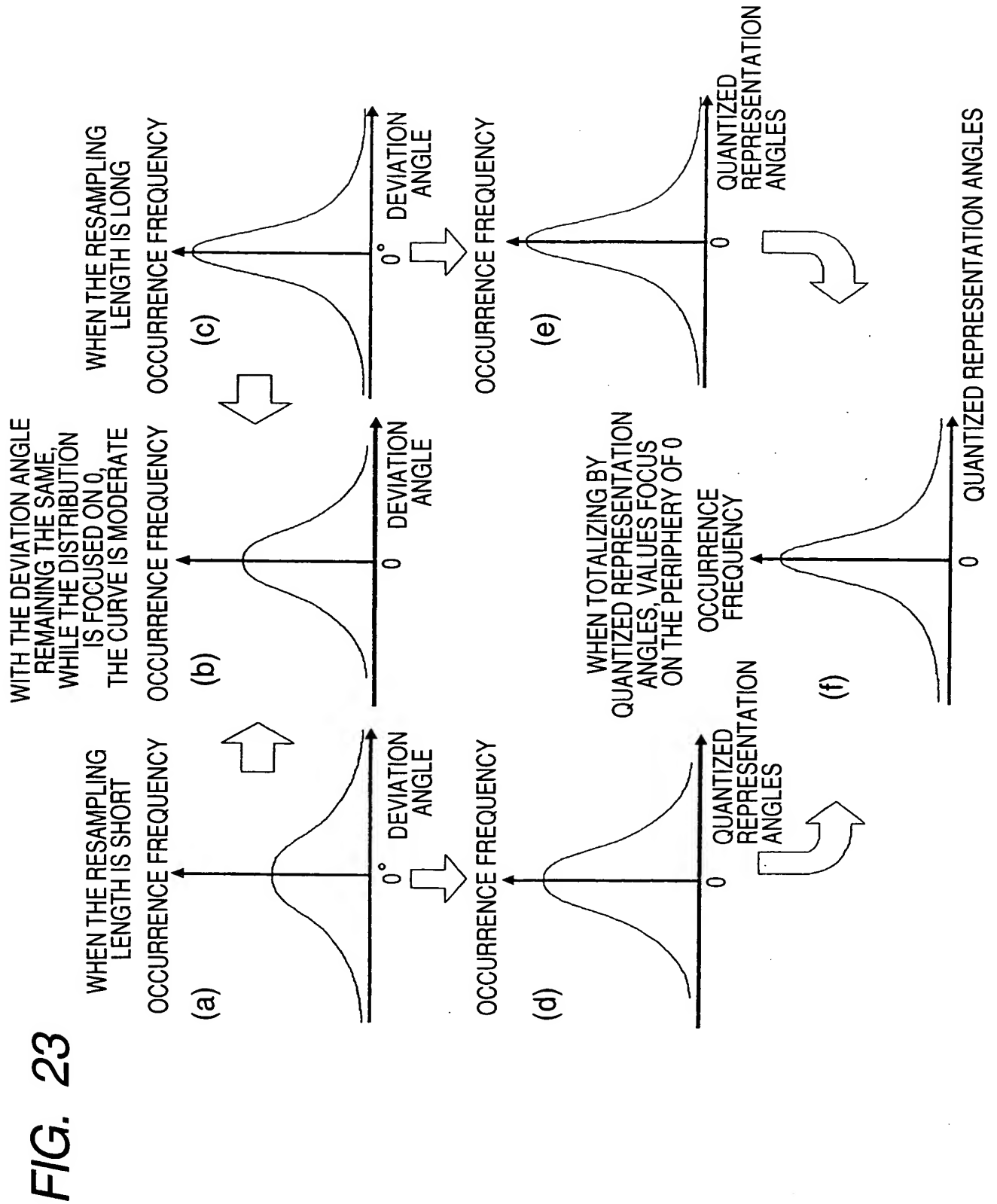
<div> <div>←----- DISTANCE ERROR Ea(m) -----→</div> </div>			
L(m)	$\delta = 1^\circ$	$\delta = 3^\circ$	$\delta = 6^\circ$
1 0	0.09	0.26	0.52
2 0	0.17	0.52	1.05
4 0	0.35	1.05	2.09
8 0	0.70	2.09	4.19
1 6 0	1.40	4.19	8.37
3 2 0	2.79	8.38	16.75
6 4 0	5.58	16.75	33.50
1 2 8 0	11.17	33.51	66.99

FIG. 21



**FIG. 22**







# A ROAD IN A MOUNTAINOUS AREA WHOSE RESAMPLING LENGTH IS SHORT

$$\delta = 2$$
 $\text{Kr} = 0.4$ 

## RESAMPLING SHAPE

## RESAMPLING SHAPE

FIG. 24(b)

A ROAD IN A MOUNTAINOUS  
AREA WHOSE RESAMPLING  
LENGTH IS SHORT

$$\delta = 6$$
 $Kr = 0.4$

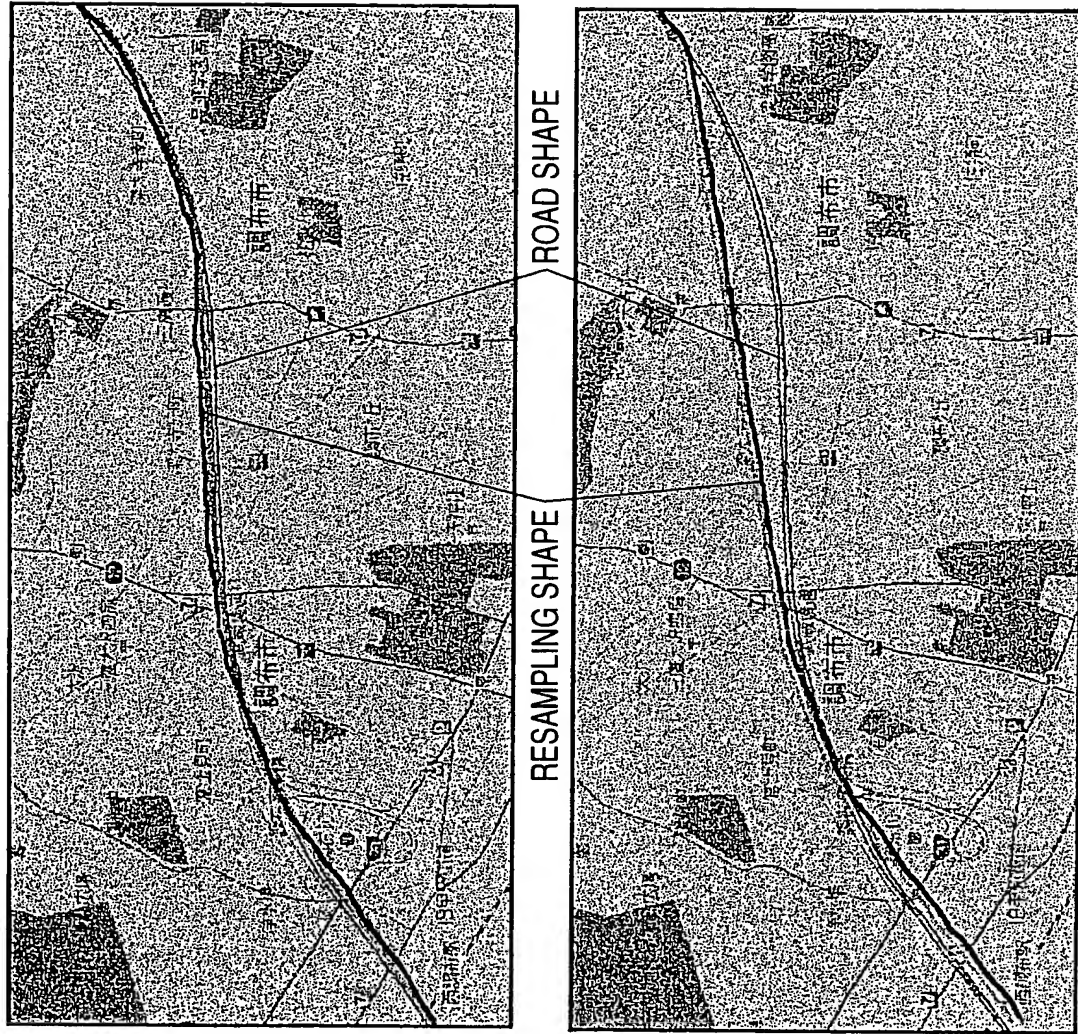


FIG. 25(a)

A HIGHWAY WHOSE  
RESAMPLING LENGTH  
IS LONG  
 $\delta = 2$   
 $Kr = 0.4$

FIG. 25(b)

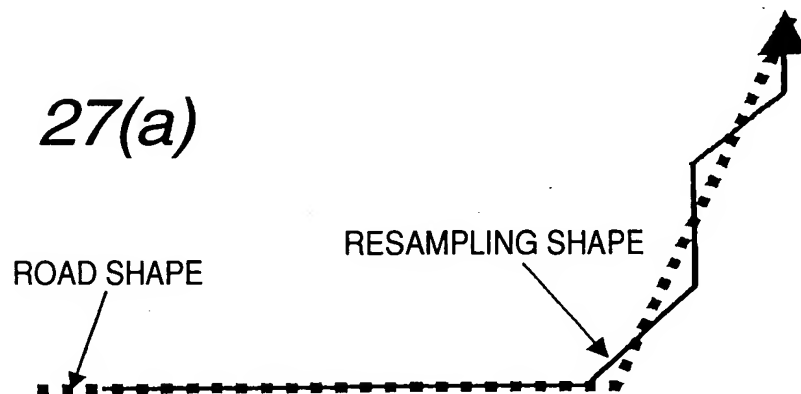
A HIGHWAY WHOSE  
RESAMPLING LENGTH  
IS LONG  
 $\delta = 6$   
 $Kr = 0.4$



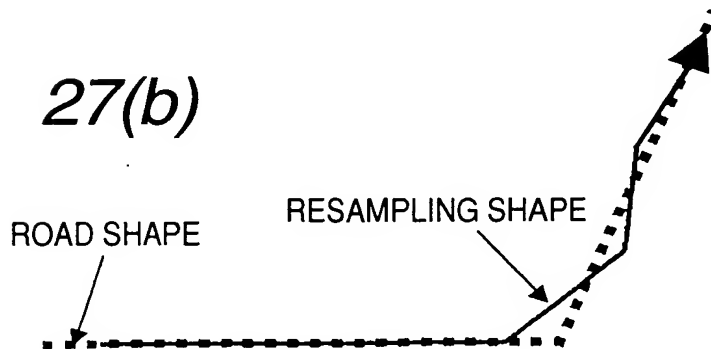
*FIG. 26*

	$\delta = 2^\circ$	$\delta = 6^\circ$
• A ROAD IN A MOUNTAINOUS AREA	1042bit	790bit
• A HIGHWAY	182bit	88bit

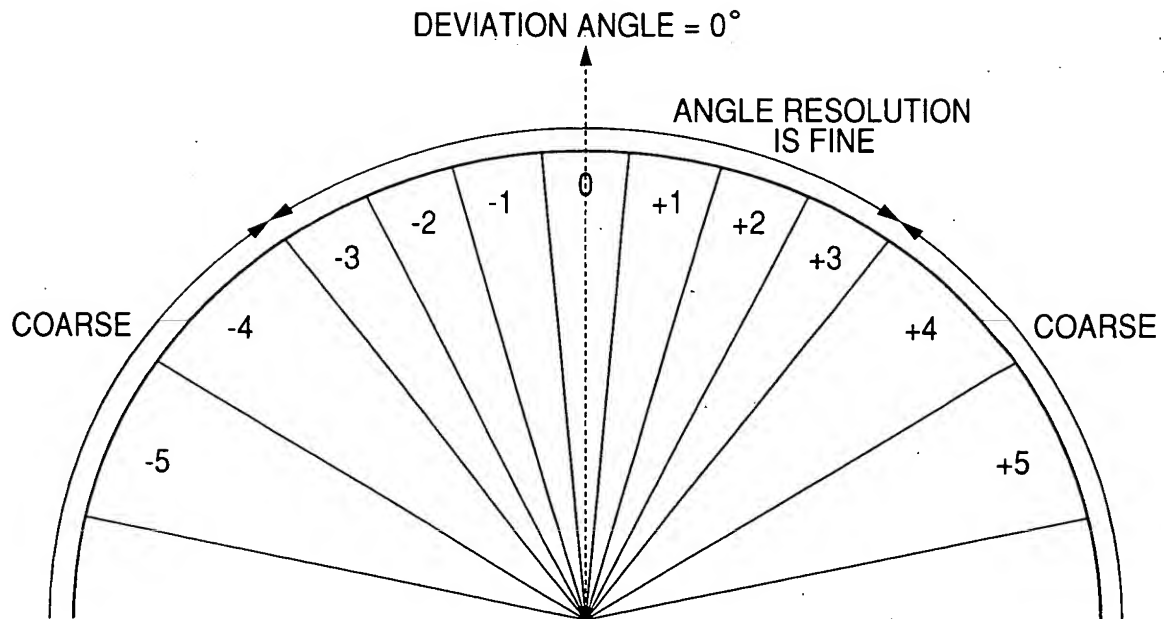
*FIG. 27(a)*



*FIG. 27(b)*



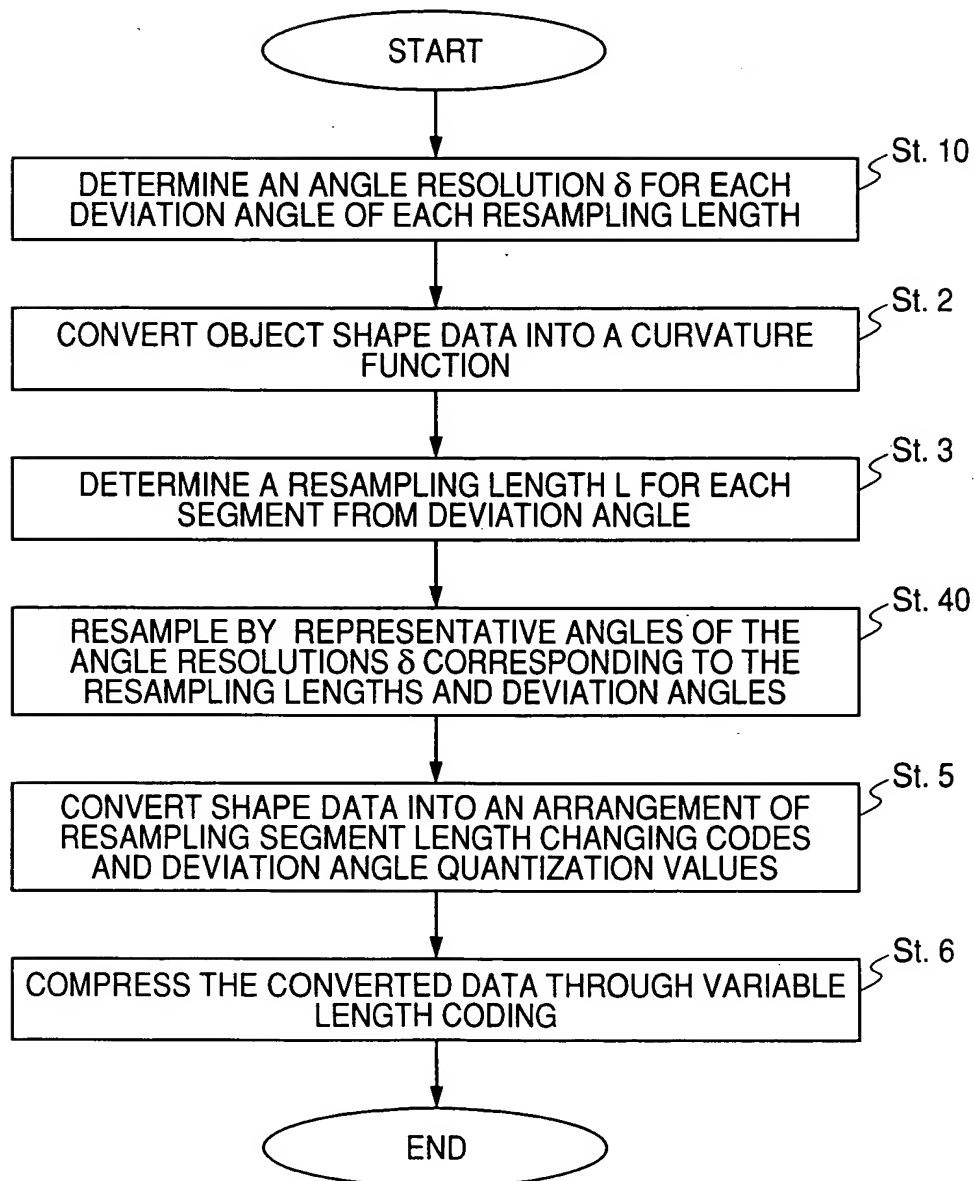
**FIG. 28**



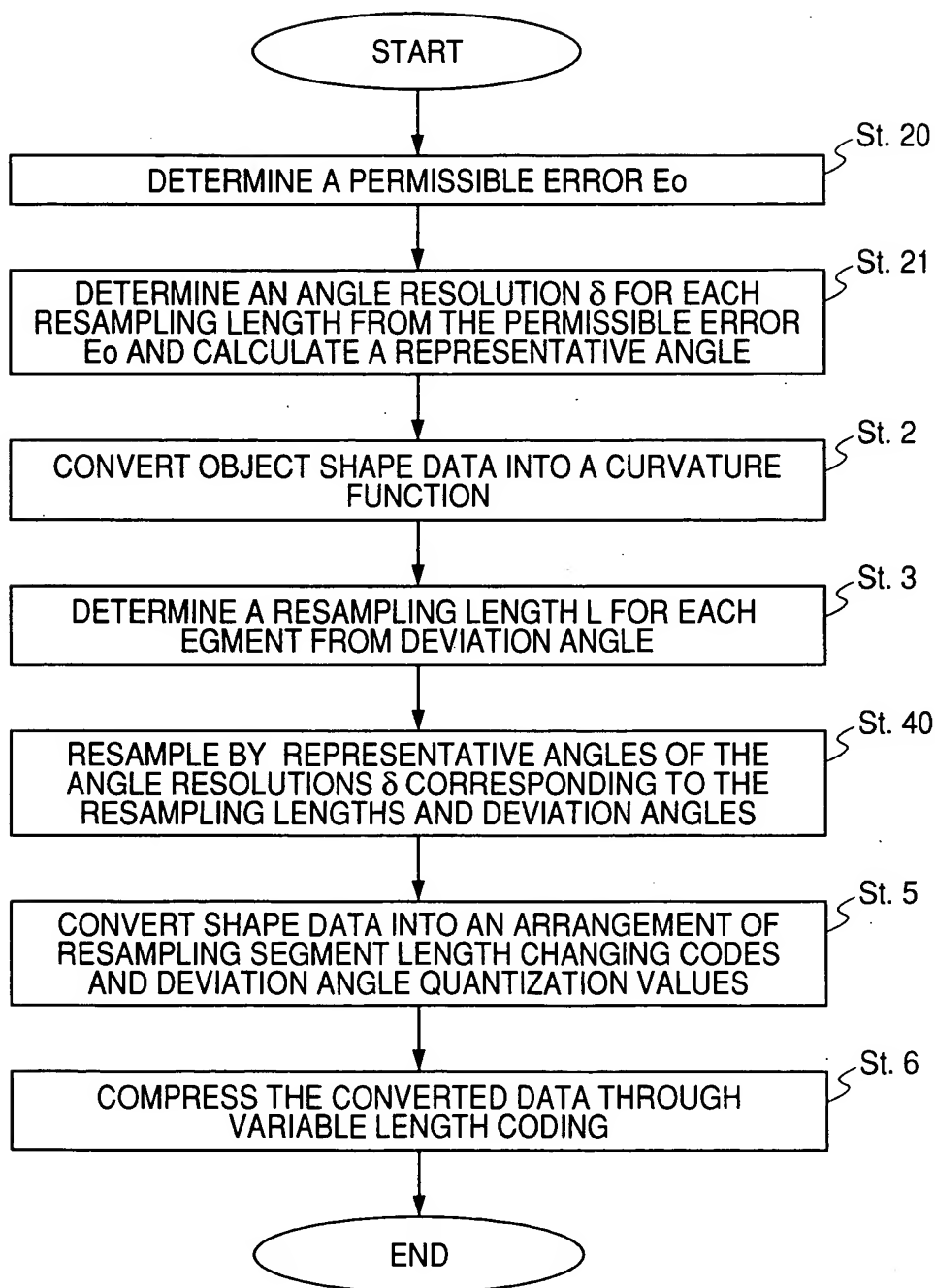
**FIG. 29**

RESAMPLING LENGTH (m)	ANGLE RESOLUTION (°) $ \theta  \leq 10$	ANGLE RESOLUTION (°) $10 <  \theta  \leq 60$	ANGLE RESOLUTION (°) $60 <  \theta $
10	6	10	30
20	4	6	20
40	3	6	10
80	2	4	4
160	2	2	4
320	1	1	2
640	1	1	2
1280	0.5	0.5	1

**FIG. 30**

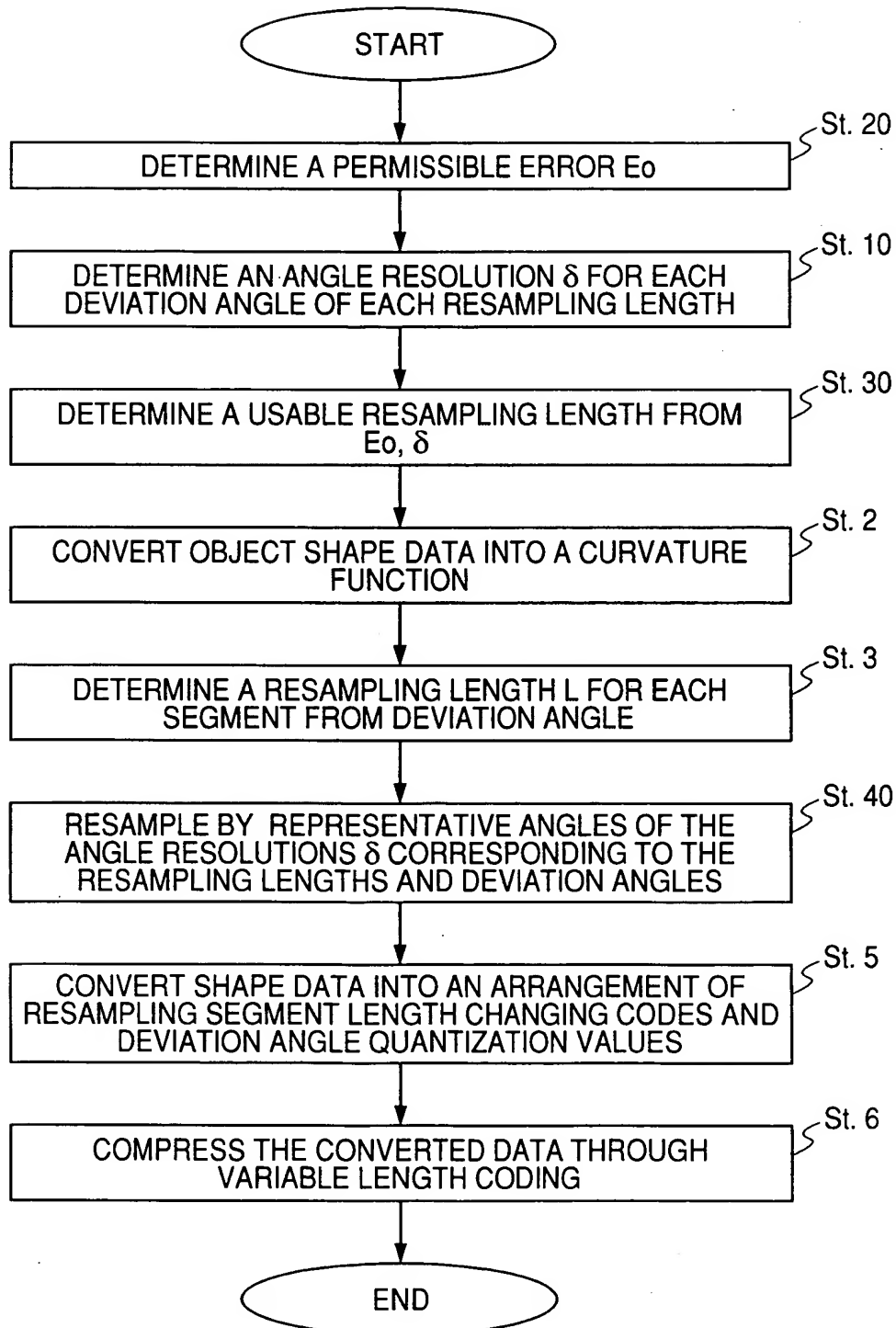


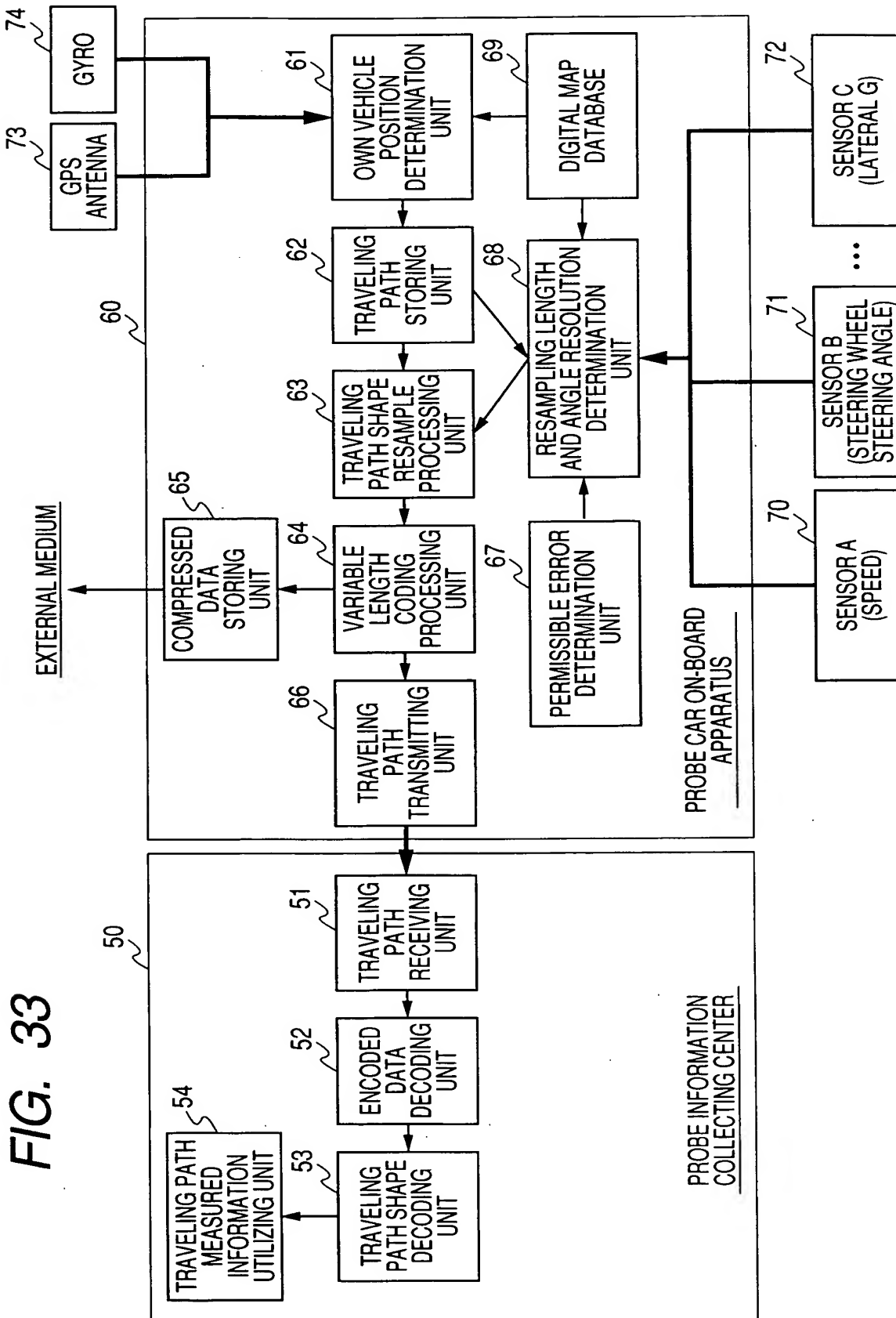
**FIG. 31**



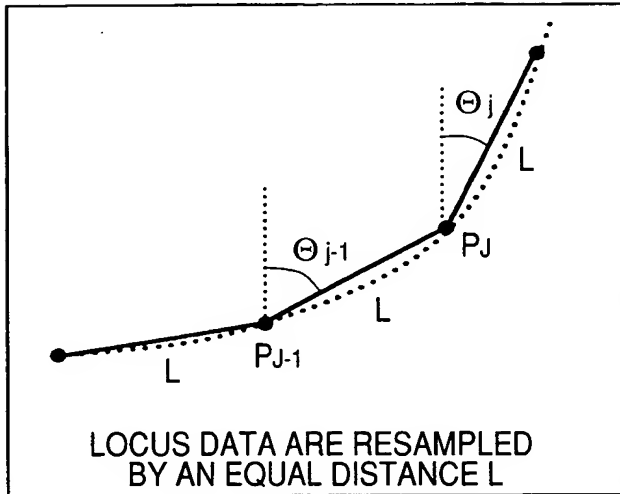
29 / 33

**FIG. 32**

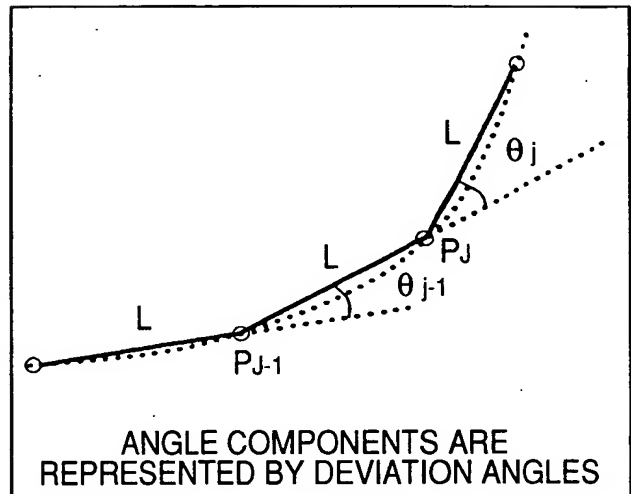




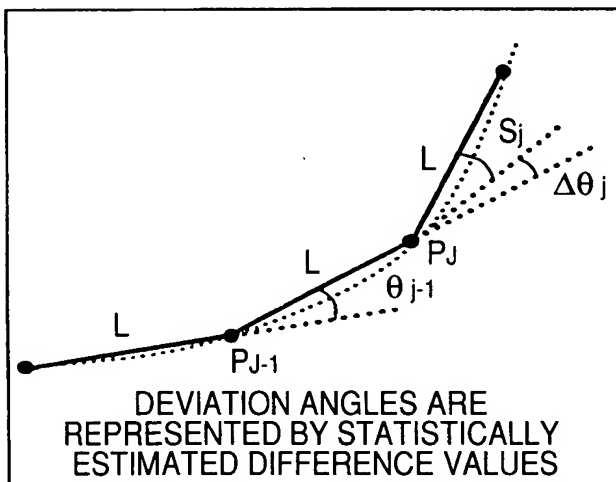
*FIG. 34(a)*



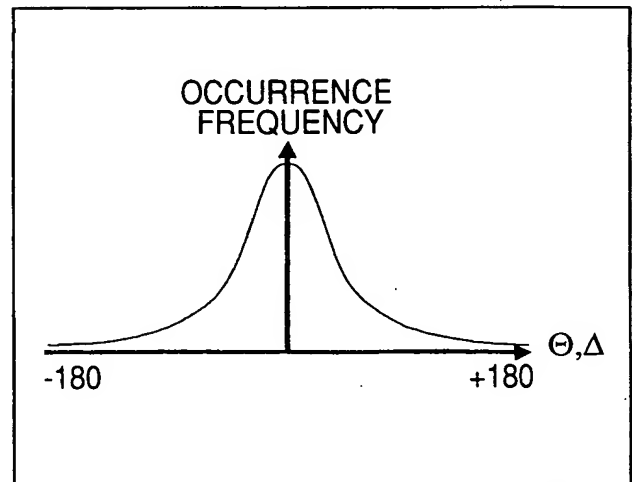
*FIG. 34(b)*



*FIG. 34(c)*



*FIG. 34(d)*

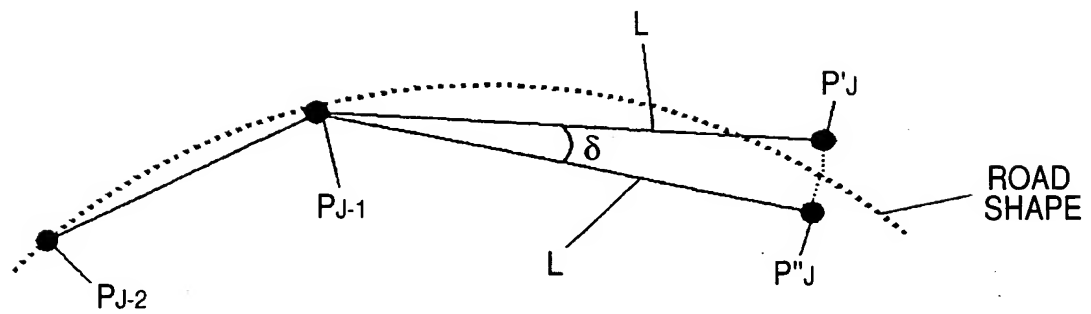


**FIG. 35**

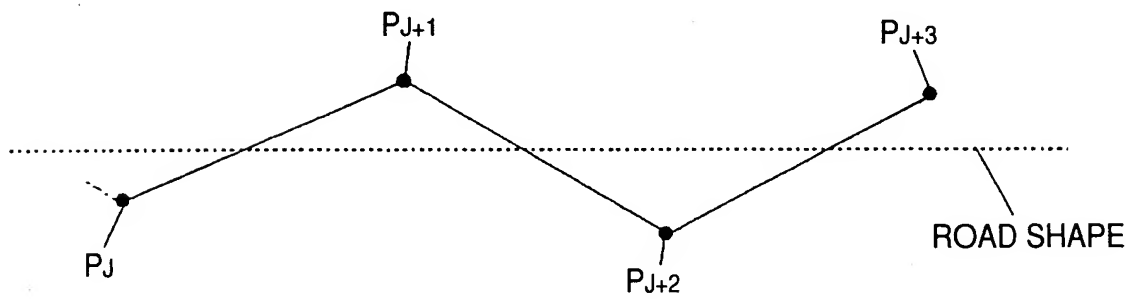
SPECIAL CODES		CODES	ADDITIONAL BITS	
EOD CODES		1100	0	
INPUT VALUES		CODES	ADDITIONAL BITS	RANGES (°) OF $\Delta\theta$ VALUES
RUN LENGTHS	VALUES OF $\Delta\theta$ (°)			
0	0	0	0	-1~+1
5	0	100	0	"
10	0	1101	0	"
0	$\pm 3$	1110	1 ( $\pm$ IDENTIFICATION)	$\pm 2\sim 4$
0	$\pm 6$	111100	1 ( $\pm$ IDENTIFICATION)	$\pm 5\sim 7$
0	$\pm 9$	111101	1 ( $\pm$ IDENTIFICATION)	$\pm 8\sim 10$
}				



*FIG. 36*



*FIG. 37*



**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☒ **FADED TEXT OR DRAWING**
- ☒ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☒ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**